

APPARATUS METHOD AND SYSTEM FOR FAULT TOLERANT VIRTUAL MEMORY MANAGEMENT

ABSTRACT OF THE INVENTION

A fault tolerant synchronized virtual memory manager for use in a load sharing environment manages memory allocation, memory mapping, and memory sharing in a first processor, while maintaining synchronization of the memory space of the first processor with the memory space of at least one partner processor. In one embodiment, synchronization is maintained via paging synchronization messages such as a space request message, an allocate memory message, a release memory message, a lock request message, a read header message, a write page message, a sense request message, an allocate read message, an allocate write message, and/or a release pointer message. Paging synchronization facilitates recovery operations without the cost and overhead of prior art fault tolerant systems.